

## **INAUGURATION OF PFI RESEARCH AND TRAINING FIELD STATION, SHINKIARI, MANSEHRA**

Formal inauguration of the Pakistan Forest Institute Field Research and Training Station at Shinkiari, Siran Forest Division, Mansehra was performed by Rao Sikandar Iqbal, Minister for Food, Agriculture and Cooperatives, Government of Pakistan on 25th July, 1989. The inauguration ceremony was attended by Dr. Mahboob-ur-Rehman, Minister of State for food, Agriculture and Cooperatives, Dr. Israr Shah, Advisor on Livestock, Mr. Abeerullah Jan, Inspector General of Forests, Provincial Ministers, Mr. Aberle, First Secretary, West German Embassy, Forest Officers of NWFP, Punjab, Azad Kashmir Forest Departments, dignitaries of Mansehra and Abbottabad districts and a large number of officers and staff of the Pakistan Forest Institute, Peshawar. The inauguration ceremony consisted of welcome address by Dr. K.M. Siddiqui, Director General, Pakistan Forest Institute, Peshawar, address by First Secretary of Embassy of Federal Republic of Germany, Islamabad and by Dr. Mahboob-ur-Rehman, Minister of State, inaugural address by Rao Sikandar Iqbal, Chief Guest and vote of thanks by Mr. Abeerullah Jan, Inspector General of Forests, Government of Pakistan, Islamabad. It was followed by unveiling of inauguration plaque and planting of a tree sapling by the Chief Guest.

The need for a field forestry research and training centre of the Institute was felt soon after its establishment at the time of creation of Pakistan, but the idea could not be materialized due to one reason or the other. However, during early seventies the people's Government abolished the contractor system of forest exploitation and marketing and decided to carry out these operations through provincial forest departments. Therefore, a strong need was felt to train manpower of the Provincial Forest Department in timber harvesting and transportation. A field facility was needed in which practical training could be imparted to the staff in the use of machinery, equipment and tools of tree felling, conversion, extraction and construction of forest roads.

In view of above a development project for the establishment of a field station for research and training especially in mountainous forests of Pakistan was prepared for the implementation with the assistance of the Government of Federal Republic of Germany in 1980. This project comprised of two phases. Phase-II of the project is expected to be completed in June, 1990. The total cost of the Phase-II is Rs. 33.849 millions out of which Rs. 28.383 millions is foreign exchange as technical assistance in the form of expert services, equipment, machinery and fellowship from the Government of Federal Republic of Germany. The West German Government has provided machinery and equipment for the field station which includes a bulldozer, a mobile cable crane, skidder, tractor, vehicles, power chain saws etc. The Government of Pakistan has provided staff and funds for the construction of a hostel for students and staff, a field workshop, garages for vehicles and residential houses for the staff. The Government of NWFP has also earmarked a forest area of about 1600 hectares in Siran Forest Division to cater to the training and research needs. This area comprises for both temperate and sub-tropical forests.



A number of research and training activities are presently being carried out in the field station by the staff of the Institute. On research side improved and modern timber harvesting technologies are being tested for higher productivity and lower cost. Results of these studies have opened new avenues for the mechanization of forestry operation, with minimum timber losses. Inventory data of forests of the field station on the modern lines has also been collected for the preparation of its management plan. Experimental plots have also been laid out to study the natural regenerative and productive potential of different forest stands and sites, as well as to determine the effects of climatic, biotic and edaphic factors on these processes.

Students of M.Sc. and B.Sc. forestry classes are fully utilizing facilities at the field station during their field exercises of preparation of forest management plans and forest surveys. In this field station refresher courses are also being conducted for the officers of forest departments in forest opening-up planning, forest road design and construction and forest management.

### **XIX IUFRO WORLD CONGRESS, MONTREAL, CANADA, AUGUST 5-11, 1990**

"Science in Forestry: IUFRO's Second Century" is the theme of the XIX IUFRO World Congress. Throughout the Congress discussions will emphasize this theme and will consider the research that will be needed as we move into IUFRO's second century of research activity in support of forestry and forest management around the world.

The main theme will be supported by two sub-themes concerned with tropical forestry and forest decline. Both remain areas for strong attention 3 years after the XVIII Congress in Ljubljana when IUFRO determined that it should focus program on them during the inter-Congress period. The XIX Congress will consider the research that has been undertaken in those intervening years and will highlight IUFRO's many efforts in these important areas.

The Congress Program is divided into 3 main areas-special plenary sessions, scientific sub-plenary sessions, and Divisional business and technical sessions including the important technical poster presentations. Each has a particular role to play and contribution to make. A strong link to the themes of the Congress will be evident throughout.

The formal Program will be supported by in-Congress technical tours and special events developed to enhance the Congress experience for delegates.

### **PAULOWNIA RESEARCH IN PAKISTAN**

The genus *Paulownia* belonging to family Scrophulariaceae and comprises of several fast growing hardwood tree species. It is indigenous to China and has a very wide range of distribution, extending from 22° to 40° N latitude and from 100° to 124° E longitude. *Paulownia* is very adaptable and extremely fast growing tree. A *Paulownia* tree of 10 years



age attains a dbh of 30—40 cm with a cubical contents of 0.3—0.5 m<sup>3</sup>. It can grow in a wide range of temperatures from -20°C to 40°C and in a variety of soils.

Its easy propagation through seed and vegetatively has helped its extensive cultivation. *Paulownia* is an excellent tree for intercropping due to its deep root system and sparsely arranged branches. In China about 1,300,000 hectares of cultivated land is intercropped with *Paulownia*. It yields a high quality timber of various important uses. It is a light wood, resistant to warping, cracking and deformation, easy to work and exhibits beautiful wood colour and grain. It is utilized for house construction, aircraft, vehicle and ship components, packing boxes, plywood, furniture, carvings, musical instruments and for many other articles.

Taking the benefit from Chinese experience of successful intercropping *Paulownia* trees with agricultural crops, Pakistan Forest Institute has initiated a project titled "*Paulownia* Research in Pakistan" with the assistance of International Development Research Centre at the cost of Rs. 2.072 million spread initially over a period of three years. Suitable species of *Paulownia* will be tested under different site conditions in Pakistan for its introduction in agro-forestry systems of the country. In this connection Prof. Zhu Zhaohua, the leader of *Paulownia* project in China visited Pakistan to identify the suitability of areas in Pakistan for cultivation of *Paulownia*. Seed of different *Paulownia* species has been procured from China and nurseries are being established to prepare a planting stock for future field trials.

It is hoped that successful introduction of *Paulownia* in the country will play an important role in reducing the pressure on natural forests and help in improving the socio-conditions of the farmers.

## TREE WATER REQUIREMENTS

The irrigated forest plantations of Pakistan have a history of more than 100 years, when in 1866 the first irrigated plantation was established in Changa Manga over an area of 4860 hectare for fuelwood production for locomotives. Later on new irrigated forest plantations were raised. Presently these are spread all over the plains of Pakistan covering an area of about 0.19 m hectares. The main species of these plantations are *Dalbergia sissoo*, *Morus alba*, *Acacia nilotica*, *Bambax ceiba*, *Melia azedarach* and *Eucalyptus* species.

The wood yield of the irrigated plantations has declined due to several factors, including inappropriate layout, poor ground levelling, irregular and insufficient watering and poor scheduling of irrigation.

The success of irrigation scheme depends greatly on irrigation systems and watering regime designed to ensure optimum economic returns. Research is needed to establish plant response to soil moisture. Water being an expensive commodity needs due consideration for its best utilization.

To optimize the biomass yield of irrigated forest plantations by improving the management and utilization of water resources a project of the Pakistan Forest Institute, Peshawar has been approved which would soon be in operation at three localities i.e. Changa Manga, Bahawalpur and Miani (Sind). The project would cost about Rs. 3.298 million during a period of 5 years. It will be funded by International Development Research Centre, Canada.

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